

Sentrol

DV1201A & DV1221A Seismic Detectors Installation Manual

Figure 1: Wiring diagram

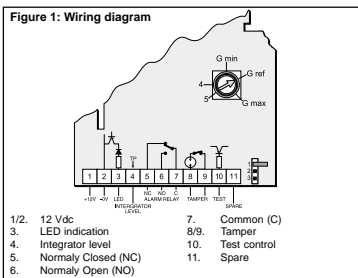


Figure 2: Two ways to test the seismic detectors

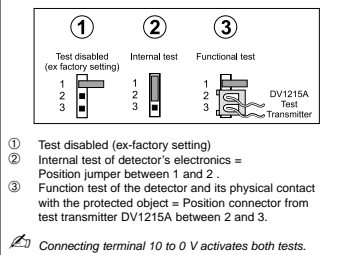


Figure 3: General characteristics of the DV1201A / DV1221A

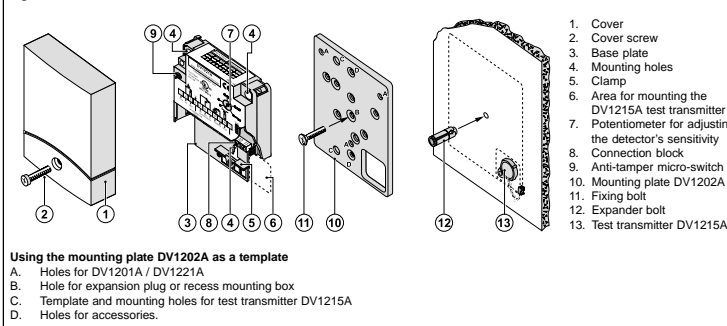
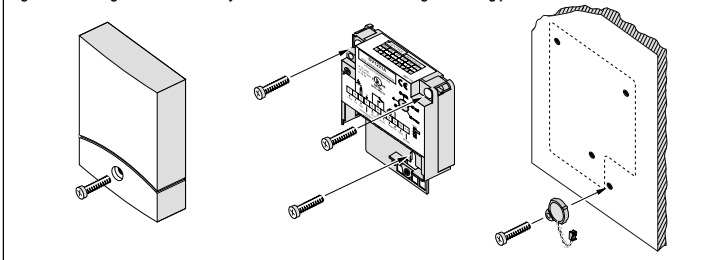


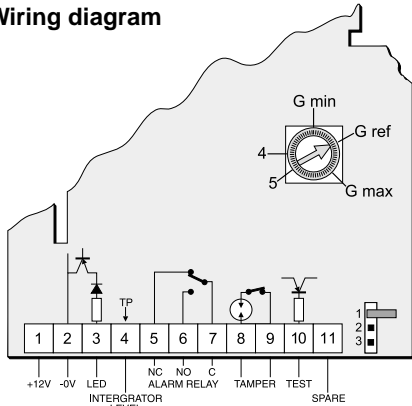
Figure 4: Mounting the detector directly on a metal surface without using a mounting plate



Form: Letter (bookshape)
Formaat: Letter (boekvorm)

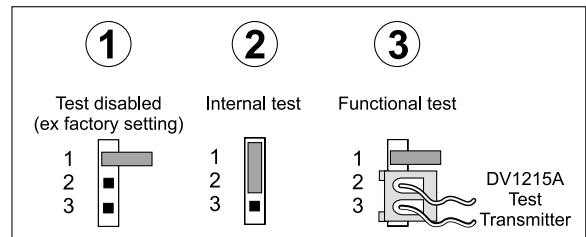
Remark:		Rev.	Date:	Modif.no.
White paper: 70gr/m ² progressio; overprint black. If P.O.D.: use 80gr/m ² . Wit papier: 70gr/m ² progressio; opdruk zwart. Wanneer P.O.D.: gebruik 80gr/m ² .		1	A 24-04-'02	
Scale:	Proj.Am 	Manual DV1201A / DV1221A		
		14 5620 999-		
Name: G. Manders	Date: 24-04-'02	Supers:		
Size: A4	Property of:	Sh.: 110-01		

Figure 1: Wiring diagram



- | | | | |
|------|----------------------|------|--------------|
| 1/2. | 12 VDC | 7. | Common (C) |
| 3. | LED indication | 8/9. | Tamper |
| 4. | Integrator level | 10. | Test control |
| 5. | Normally Closed (NC) | 11. | Spare |
| 6. | Normally Open (NO) | | |

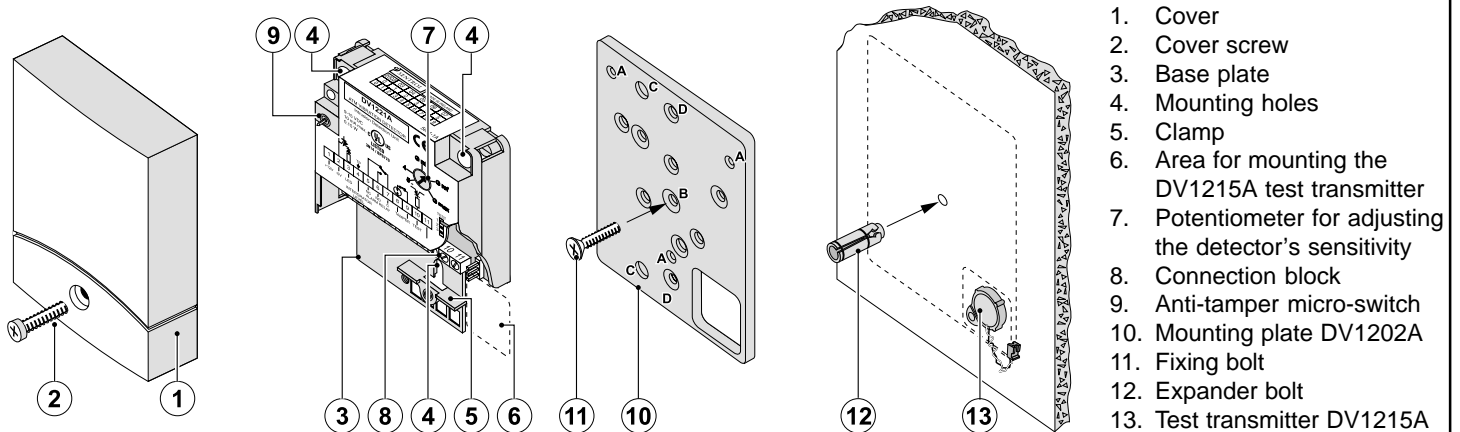
Figure 2: Two ways to test the seismic detectors



- ① Test disabled (ex-factory setting)
- ② Internal test of detector's electronics = Position jumper between 1 and 2 .
- ③ Function test of the detector and its physical contact with the protected object = Position connector from test transmitter DV1215A between 2 and 3.

Connecting terminal 10 to 0 V activates both tests.

Figure 3: General characteristics of the DV1201A / DV1221A



Using the mounting plate DV1202A as a template

- A. Holes for DV1201A / DV1221A
- B. Hole for expansion plug or recess mounting box
- C. Template and mounting holes for test transmitter DV1215A
- D. Holes for accessories.

Figure 4: Mounting the detector directly on a metal surface without using a mounting plate

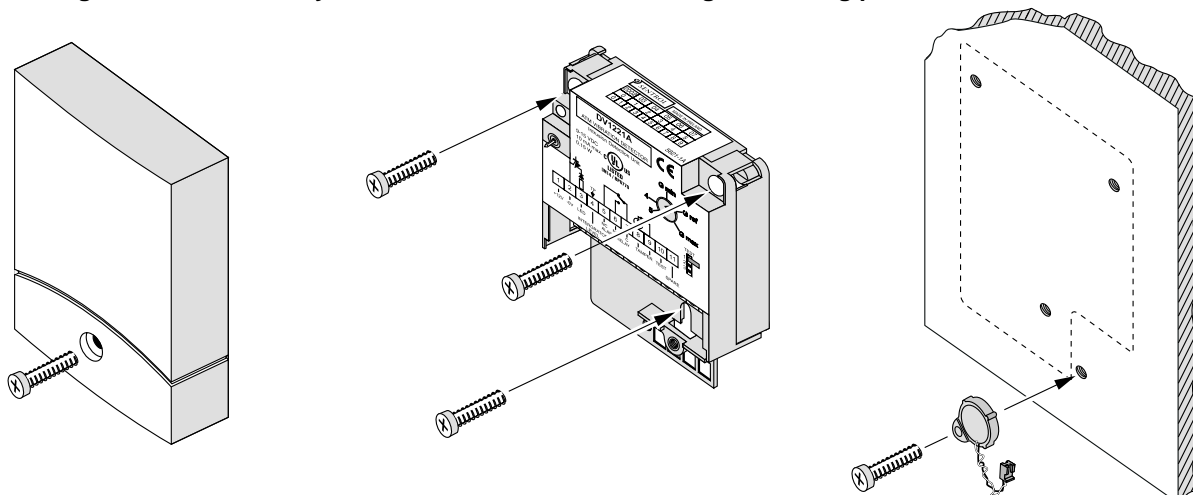


Figure 5: Mounting on concrete

Always use a DV1202A mounting plate. The expansion plug must penetrate at least 50 mm into the concrete. Please follow the steps shown in Figure 6 if you are installing the test transmitter DV1215A.

For the equipment to conform to CEI standard 79-2, the DV1215A test transmitter must be installed.

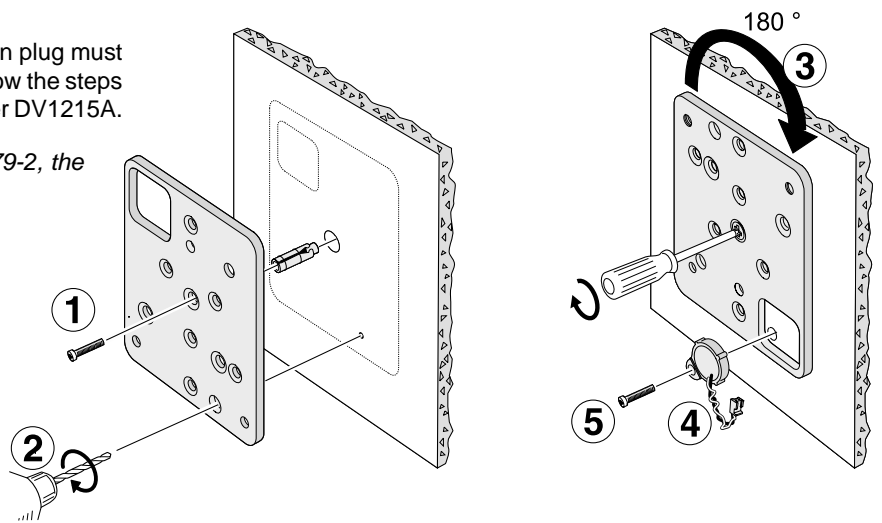


Figure 6: Control and function test

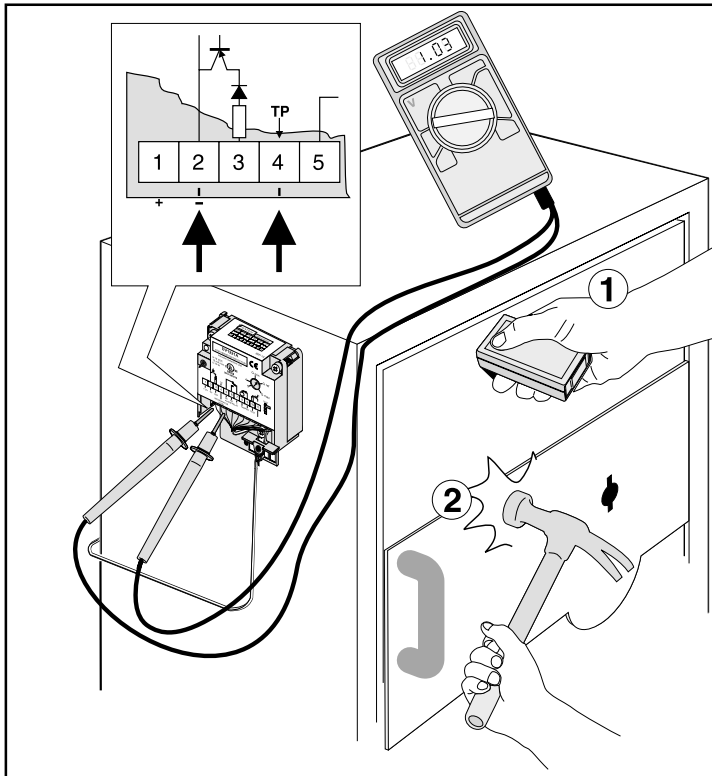
Using a voltmeter, check the background signal level in the detector to prevent nuisance alarms. Set the sensitivity to Gmax during the test.

DV1201A	DV1221A	Measure
0.7 V	0 V	None
1.4 V	2 V	Reduce range/remove source

Try to remove the source of ambient noise instead of reducing the range.

Functional testing with hand tester DV1230 ① and mechanical tool ②:

DV1201A	DV1221A
Alarm in 30 sec.	Alarm in 45 sec.
Alarm after 5 blows	NA



Detection range (in foot):

Material	Sensitivity setting	Thermal lance	Diamond disk	Drilling
Concrete	1/G _{max}	13.12	45.93	45.93
Steel		26.25	45.93	45.93
Brick		9.84	26.25	26.25
Concrete	2/G _{ref}	9.84	29.53	29.53
Steel		13.12	29.53	29.53
Brick		3.28	19.69	19.69
Concrete	3/G _{min}	6.56	19.69	19.69
Steel		6.56	19.69	19.69
Brick		-	13.12	13.12
Concrete	4	3.28	16.40	16.40
Steel		3.28	16.40	16.40
Brick		-	9.84	9.84
Concrete	5	-	13.12	13.12
Steel		-	13.12	13.12
Brick		-	6.56	6.56

Technical specifications:

Input power: 9-15 VDC
2 V max. ripple pp

Current consumption: Nom. 8.6 mA

Alarm output: Form C solid state relay, max. series resistance 35 Ohm

Alarm indication: LED-ind. output 3

Sensitivity: 5 steps of 6 dB each

Range: See Table "Detection range"

Sabotage protection: Temp. 183.2 °F
drill shield,
opening/pry-off contact,
7.5 V

Low voltage alarm: -4 °F to + 131 °F

Temperature limits: 3.93 x 3.15 x 1.30 inches

Dimensions: Grey, RAL 7035

Colour: 0.86 lb

Weight:

Figure 7: Wiring the DV1201A/DV1221A into Most Security Systems

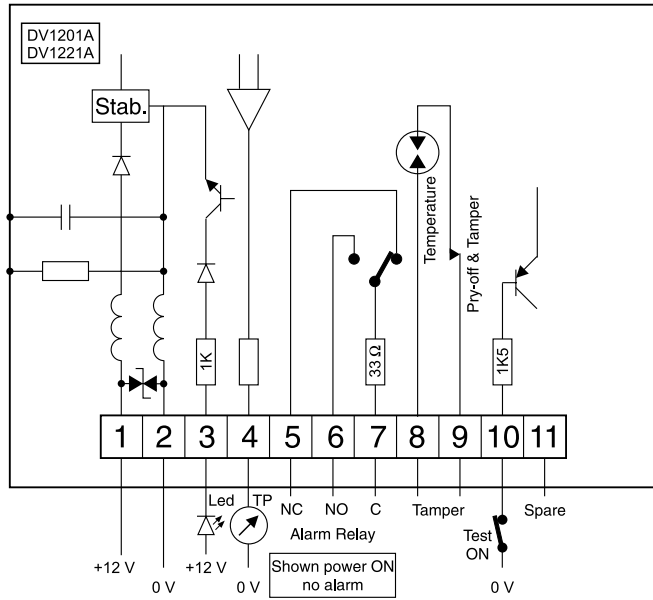


Figure 8: Connecting the DV1201A to a Four-wire Circuit Type Control in an UL Complete Mercantile Safe System

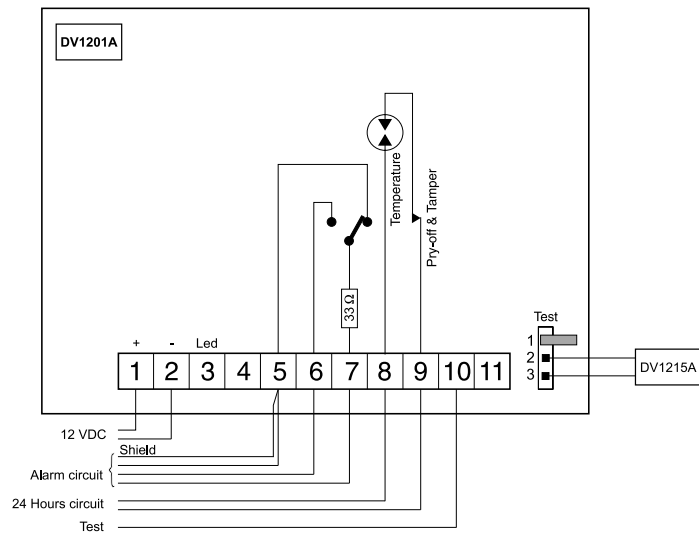


Figure 9: Connecting the DV1201A to a Two-wire Balanced Loop Type Control in an UL Complete Mercantile Safe System

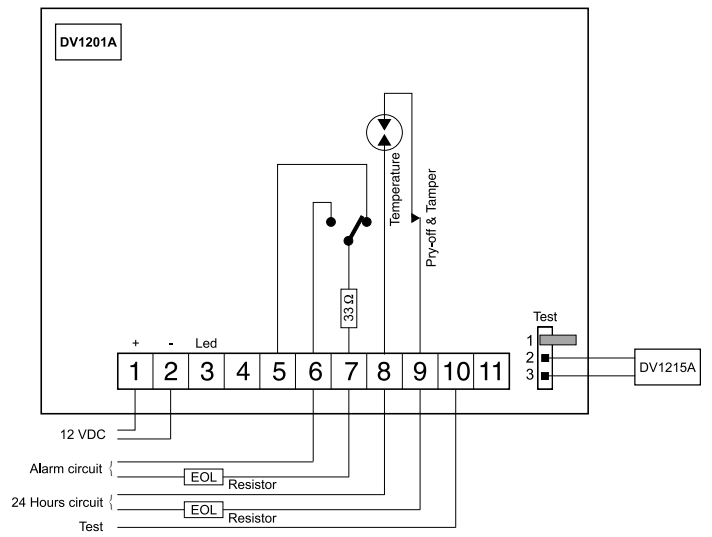


Figure 10: Wire Diagram DV1208A

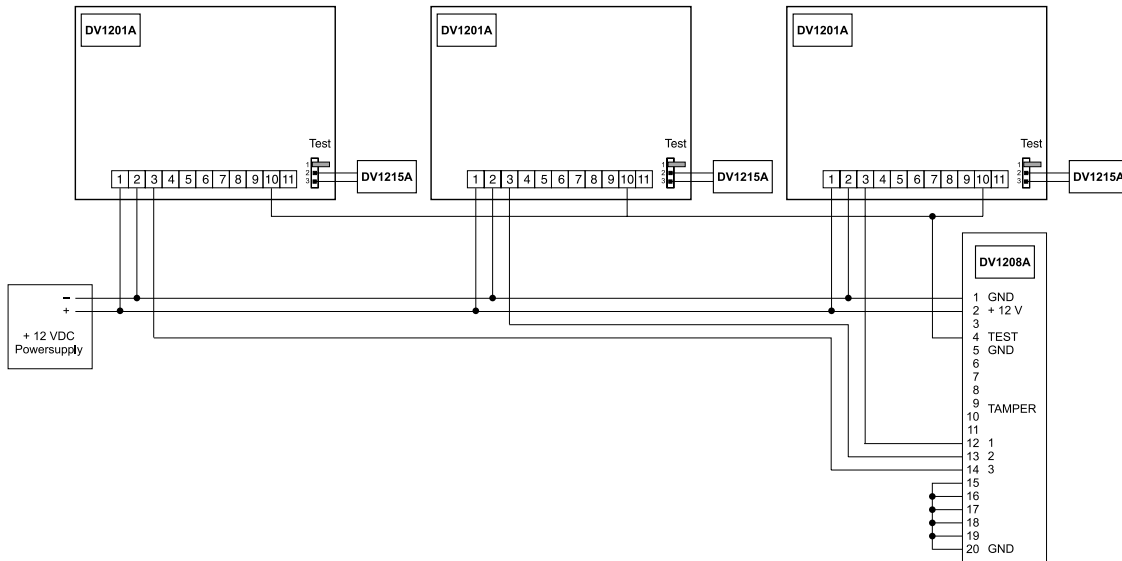


Figure 11

